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EXAMINER

COOLEY, CHARLES E

ART UNIT	PAPER NUMBER
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1723

DATE MAILED: 12/10/2002

13

Please find below and/or attached an Office communication concerning this application or proceeding.

mk-13

# Office Action Summary

Application No.  
09/436,637

Applicant(s)  
Nitta et al.

Examiner  
Charles Cooley

Art Unit  
1723



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 3 Oct 2002
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-61 is/are pending in the application.
- 4a) Of the above, claim(s) 16-61 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claims 1-61 are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 3 Oct 2002 is: a) ☒ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☒ None of:
- ☒ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                              | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)          | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ | 6) <input type="checkbox"/> Other:  |

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## OFFICE ACTION

### *Election/Restriction*

1. Claims 16-61 remain withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made without traverse in Paper No. 9.

### *Priority*

2. Acknowledgment is made of applicant's claim for priority based on three Japanese applications. It is noted, however, that applicant has not filed certified copies of the applications as required by 35 U.S.C. § 119. The letter of 14 FEB 2000 regarding the priority documents is noted, however, the original priority documents are not in the file wrapper. Applicant states copies of the missing priority documents were submitted with the last response filed 03 OCT 2002, yet the file still lacks the documents. Copies of the missing priority documents should be resubmitted with any future response and firmly attached to the response to hopefully prevent any further misplacement.

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***Drawings***

3. The proposed drawing correction and/or the proposed substitute sheets of drawings, filed on 03 OCT 2002 have been approved by the Examiner but note the following objection:

4. The drawings filed 14 FEB 2000 remain objected to because of the following informality:

a. The exploded view of Fig. 11A should be embraced by a bracket (37 CFR 1.84(h)(1)).

Correction is required.

5. Applicant is required to submit a proposed drawing correction in response to this Office Action. Any proposal by the applicant for amendment of the drawings to cure defects must include a print or pen-and-ink sketch showing changes in *red ink* in accordance with MPEP § 608.02(v).

**IMPORTANT NOTE:** The filing of new formal drawings to correct the noted defect may be deferred until the application is allowed by the examiner, but the print or pen-and-ink sketch with proposed corrections shown in red ink is required in response to this Office Action, and *may not be deferred*.

***Specification***

6. The abstract is acceptable.

7. The title is acceptable.

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***Claim Rejections - 35 U.S.C. § 112, first paragraph***

8. The following is a quotation of the first paragraph of 35 U.S.C. § 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The specification is objected to under 35 U.S.C. § 112, first paragraph, as the specification, as originally filed, does not provide support for the invention as is now claimed.

The "without circulation" language (tantamount to a negative limitation) added to claim 1 and argued by Applicant appears to lack support in the specification. Applicant apparently states that Figure 1 and page 17 supports this limitation yet the examiner finds no such support in either of these locations. Any negative limitation or exclusionary proviso must have basis in the original disclosure. *Ex parte Grasselli*, 231 USPQ 393 (Bd. App. 1983) *aff'd mem.*, 738 F.2d 453 (Fed. Cir. 1984).

9. Claims 1-15 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

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***Claim Rejections - 35 U.S.C. § 112, second paragraph***

10. Claims 1-15 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The second paragraph of 35 USC 112 requires a claim to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Under *In re Hammack*, 166 USPQ 204 (CCPA 1970) and *In re Moore*, 169 USPQ 236 (CCPA 1971), claims must be analyzed to determine their metes and bounds so that it is clear from the claim language what subject matter the claims encompass. This analysis must be performed in light of the applicable prior art and the disclosure. The definiteness of the claims is important to allow others who wish to enter the market place to ascertain the boundaries of protection that are provided by the claims. *Ex parte Kristensen*, 10 USPQ 2d 1701, 1703 (BPAI 1989). The pending claims fail to particularly point out and distinctly claim the subject matter which applicant regards as the invention and are therefore of indeterminate scope for the following reasons:

Claim 1: since the "without circulation" language added to claim 1 is not defined by the specification as noted above, such language renders the scope of claim 1 and the claims depending therefrom indeterminate.

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Claim 6, line 1: "said shaker" lacks antecedent basis.

In the instant application, it appears that the preamble of claim 1 sets forth that a subcombination of the chemical supply system is being claimed and the chemical treatment chamber is only functionally recited. The scope of the claims is clear as long as no further mention of the chemical treatment chamber appears in the claims, or the bodies of the claims refer to the chemical treatment chamber in a functional manner. A question arises as to whether the claims recite a combination or subcombination when the chemical treatment chamber is positively recited within the bodies of the claims wherein an inconsistency develops in the claims. The preamble indicates a subcombination of the chemical supply system, while in the bodies of one or more claims, there is at least one occurrence of a positive recital of structure indicating that the combination of the chemical supply system and chemical treatment chamber is being claimed. It is not clear if Applicant's intent is to claim merely the chemical supply system or the chemical supply system in combination with the chemical treatment chamber.

Claims 1-15 are therefore inconsistent and indefinite because the preambles of the claims recite the subcombination (the chemical supply system) for use with the combination (the chemical supply system in combination with the chemical treatment chamber) yet the elements of the chemical supply system and chemical treatment

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chamber apparently are claimed in structural combination in the bodies of the claims. If the elements of the invention are claimed in combination in the bodies of the claims, the preambles must also claim them in combination or the subject matter of the preambles would not be considered consistent with limitations recited in the bodies of the claim rendering the scope of the claims indefinite. In the instant case, it is not clear as to whether the claims are intended to be combination claims of the chemical supply system *and* chemical treatment chamber or intended to be subcombination claims of the chemical supply system only. The question has arisen based on the present claiming of "wherein said mixture solution is supplied from said discharge portion to said chemical treatment chamber" (claim 1). Since it appears that there is at least one occurrence of a positive recital of structure indicating that the combination of the chemical supply system and chemical treatment chamber is being claimed, the scope of the claims is indefinite.

11. Each pending claim should be thoroughly reviewed such that these and any other informalities are corrected so the claims may particularly point out and distinctly claim the subject matter which applicant regards as the invention, as required by 35 U.S.C. § 112, second paragraph.



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***Claim Rejections - 35 U.S.C. § 102***

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

13. Claims 1, 3, 5, 8, 9, 11, 12, 13, and 15 are rejected under 35 U.S.C. § 102(e) as being anticipated by Hashimoto et al. (USP 5,918,976).

The patent to Hashimoto et al. (USP 5,918,976) discloses a chemical mixing system comprising a chemical reservoir 16; chemical supply means 15; piping system (as seen in Figs. 1-2) with a discharge portion 25; the chemical supply means including a first pump 15 and a second pump 22 for feeding liquid; cooling means 12, 18, 20; connecting flow passage 17 with a capillary 14; control system 27; mixing means 19 with a spiral pitch (Fig. 4); a flowing-in portion 41 of the mixing means 19 being offset from a flowing-out portion 44 of the mixing means; the reservoir including a main reservoir 16 and an auxiliary reservoir 11 with level regulation means 29; the system

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having a connecting tube (proximate 24) and the system being a closed system as seen in the Figures.

14. Claims 1, 8, 9, 12, and 15 are rejected under 35 U.S.C. § 102(b) as being anticipated by Rodgers et al. (USP 4,664,528).

The patent to Rodgers et al. (USP 4,664,528) discloses a chemical mixing system comprising a chemical reservoir 7; chemical supply means 1; piping system (as seen in Fig. 1) with a discharge portion 28; connecting flow passage 12 or 18 with a capillary 13 or 19; control system 35; mixing means 15, 24; a flowing-in portion 16 of the mixing means being offset from a flowing-out portion 26 of the mixing means; the system having a connecting tube 11 and the system being a closed system as seen in the Figures.

15. Claims 1, 3, 8, 12, 13, and 15 are rejected under 35 U.S.C. § 102(b) as being anticipated by Cadeo et al. (USP 4,964,732).

The patent to Cadeo et al. (USP 4,964,732) discloses a chemical mixing system comprising a chemical reservoir 1, 2, 3, 4; chemical supply means 5, 6, 7, 21; piping system (as seen in Fig. 3) with a discharge portion (downstream of 20); the chemical supply means including a first pump 5, 6, 7, or 21 and a second pump (another of 5, 6, 7, or 21) for feeding liquid; connecting flow passage with a capillary 11; mixing means 13; a flowing-in portion of the mixing means 13 being axially offset from a flowing-out portion of the mixing means; the reservoir including a main reservoir 1, 2, 3, or 4 and

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an auxiliary reservoir (another of 1, 2, 3, or 4) with level regulation means 11; the system having a connecting tube 21 and the system being a closed system as seen in Figure 3.

16. Claims 1, 8, 9, 10, 13, and 15 are rejected under 35 U.S.C. § 102(b) as being anticipated by O'Dougherty et al. (USP 5,522,660).

The patent to O'Dougherty et al. (USP 5,522,660) discloses a chemical mixing system comprising a chemical reservoir 23, 23.1; chemical supply means 20; piping system (as seen in Fig. 1) with a discharge portion 56; connecting flow passage 24 with a capillary 27; control system 14; flow regulation means 53-55; concentration regulation means 39; chemical supply control means 31; concentration control means (Fig. 4); the reservoir including a main reservoir 23 or 23.1 and an auxiliary reservoir 11 with level regulation means 13, 55; the system having a connecting tube 22 and the system being a closed system as seen in Figure 1.

17. Claims 1, 3, 8, 9, 13, 14, and 15 are rejected under 35 U.S.C. § 102(e) as being anticipated by Suzuki et al. (USP 5,800,056).

The patent to Suzuki et al. (USP 5,800,056) discloses a chemical mixing system comprising a chemical reservoir 5; chemical supply means 11; piping system (as seen in Fig. 1) with a discharge portion V12 or V15 which supply the mixture to chambers 12 or 15; the chemical supply means including a first pump 11 and a second pump 13 for feeding liquid; connecting flow passage with a capillary V10; control system C; the

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reservoir including a main reservoir 5 and an auxiliary reservoir 2 with level regulation means S1, S2 in the form of sensors; the system having a connecting tube (in which element V4 is situated) and the system being a closed system as seen in Figure 1.

\* \* \*

With regard to the above rejections, the operational and functional language throughout the claims (non-limiting examples being the language of claim 1, lines 10-12 and language present in claims 3, 6, 14, 15) has been considered but fails to impart or invoke any further structure or means (per 35 USC 112, sixth paragraph and MPEP 2181) to the pending apparatus claims which defines over the applied prior art. Consequently, since all of the claimed structure is met by the applied prior art, the rejections under 35 USC 102 are deemed proper.

***Claim Rejections - 35 U.S.C. § 103***

18. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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19. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

20. Claim 5 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Rodgers et al. (USP 4,664,528), Cadeo et al. (USP 4,964,732), O'Dougherty et al. (USP 5,522,660), or Suzuki et al. (USP 5,800,056) in view of Pawloski et al. (USP 3,738,815).

Rodgers et al. (USP 4,664,528), Cadeo et al. (USP 4,964,732), O'Dougherty et al. (USP 5,522,660), or Suzuki et al. (USP 5,800,056) do not disclose the recited cooling means. Pawloski et al. (USP 3,738,815) discloses a chemical processing system including piping loop 10 and a pump 20 therein. A cooling means 32 is provided about the piping and proximate the pump. It would have been obvious to one having ordinary skill in the art, at the time applicant's invention was made, to have provided the systems of Rodgers et al. (USP 4,664,528), Cadeo et al. (USP 4,964,732), O'Dougherty et al. (USP 5,522,660), or Suzuki et al. (USP 5,800,056) in

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view of Pawloski et al. (USP 3,738,815) with a cooling means for the purpose of cooling the elements of the system such as the piping and pump (see claim 1, part 6).

21. Claim 7 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Hashimoto et al. (USP 5,918,976), Rodgers et al. (USP 4,664,528), Cadeo et al. (USP 4,964,732), O'Dougherty et al. (USP 5,522,660), or Suzuki et al. (USP 5,800,056) in view of Shibata et al. (USP 4,787,921).

Hashimoto et al. (USP 5,918,976), Rodgers et al. (USP 4,664,528), Cadeo et al. (USP 4,964,732), O'Dougherty et al. (USP 5,522,660), or Suzuki et al. (USP 5,800,056) do not disclose the recited degassing tube. Shibata et al. (USP 4,787,921) discloses a degassing tube (Fig. 1) with a degassing membrane 4 used in chemical processing systems. It would have been obvious to one having ordinary skill in the art, at the time applicant's invention was made, to have provided the systems of Hashimoto et al. (USP 5,918,976), Rodgers et al. (USP 4,664,528), Cadeo et al. (USP 4,964,732), O'Dougherty et al. (USP 5,522,660), or Suzuki et al. (USP 5,800,056) with a degassing tube as disclosed by Shibata et al. (USP 4,787,921) for the purpose of removing gaseous components contained in liquids (col. 1, lines 6-18).

22. Claims 1, 3, 5, 8, 9, 11, 12, 13, and 15 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Hashimoto et al. (USP 5,918,976) in view of Ferri, Jr. et al. (USP 5,803,599).

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Assuming, *arguendo*, that claim 1 is drawn to the chemical supply system in combination with the chemical treatment chamber, the patent to Hashimoto et al. discloses all of the recited subject matter as noted above with the exception of the chemical treatment chamber. The patent to Ferri, Jr. et al. (USP 5,803,599) discloses a chemical supply system (Fig. 1a) which may be implemented with a wide range of chemicals and which system discharges a prepared mixture from a discharge portion of the system to a downstream chemical treatment chamber 18a, 18b, or 18c (Fig. 2). It would have been obvious to one having ordinary skill in the art, at the time applicant's invention was made, to have provided the system of Hashimoto et al. (USP 5,918,976) with a downstream chemical treatment chamber connected to the discharge portion thereof for the purposes of distributing the mixture to one or more downstream usage facilities (such as polishers or storage - Col. 4, lines 38-49; col. 6, lines 39-46; and col. 8, lines 46-54 and lines 63-67).

23. Claims 1, 8, 9, 12, and 15 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Rodgers et al. (USP 4,664,528) in view of Ferri, Jr. et al. (USP 5,803,599).

Assuming, *arguendo*, that claim 1 is drawn to the chemical supply system in combination with the chemical treatment chamber, the patent to Rodgers et al. discloses all of the recited subject matter as noted above with the exception of the chemical treatment chamber. The patent to Ferri, Jr. et al. (USP 5,803,599) discloses a

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chemical supply system (Fig. 1a) which may be implemented with a wide range of chemicals and which system discharges a prepared mixture from a discharge portion of the system to a downstream chemical treatment chamber 18a, 18b, or 18c (Fig. 2). It would have been obvious to one having ordinary skill in the art, at the time applicant's invention was made, to have provided the system of Rodgers et al. (USP 4,664,528) with a downstream chemical treatment chamber connected to the discharge portion thereof for the purposes of distributing the mixture to one or more downstream usage facilities (such as polishers or storage - Col. 4, lines 38-49; col. 6, lines 39-46; and col. 8, lines 46-54 and lines 63-67).

24. Claims 1, 3, 8, 12, 13, and 15 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Cadeo et al. (USP 4,964,732) in view of Ferri, Jr. et al. (USP 5,803,599).

Assuming, *arguendo*, that claim 1 is drawn to the chemical supply system in combination with the chemical treatment chamber, the patent to Cadeo et al. (USP 4,964,732) discloses all of the recited subject matter as noted above with the exception of the chemical treatment chamber. The patent to Ferri, Jr. et al. (USP 5,803,599) discloses a chemical supply system (Fig. 1a) which may be implemented with a wide range of chemicals and which system discharges a prepared mixture from a discharge portion of the system to a downstream chemical treatment chamber 18a, 18b, or 18c (Fig. 2). It would have been obvious to one having ordinary skill in the art, at the time



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applicant's invention was made, to have provided the system of Cadeo et al. (USP 4,964,732) with a downstream chemical treatment chamber connected to the discharge portion thereof for the purposes of distributing the mixture to one or more downstream usage facilities (such as polishers or storage - Col. 4, lines 38-49; col. 6, lines 39-46; and col. 8, lines 46-54 and lines 63-67).

25. Claims 1, 8, 9, 10, 13, and 15 are rejected under 35 U.S.C. § 103(a) as being unpatentable over O'Dougherty et al. (USP 5,522,660) in view of Ferri, Jr. et al. (USP 5,803,599).

Assuming, *arguendo*, that claim 1 is drawn to the chemical supply system in combination with the chemical treatment chamber, the patent to O'Dougherty et al. (USP 5,522,660) discloses all of the recited subject matter as noted above with the exception of the chemical treatment chamber. The patent to Ferri, Jr. et al. (USP 5,803,599) discloses a chemical supply system (Fig. 1a) which may be implemented with a wide range of chemicals and which system discharges a prepared mixture from a discharge portion of the system to a downstream chemical treatment chamber 18a, 18b, or 18c (Fig. 2). It would have been obvious to one having ordinary skill in the art, at the time applicant's invention was made, to have provided the system of O'Dougherty et al. (USP 5,522,660) with a downstream chemical treatment chamber connected to the discharge portion thereof for the purposes of distributing the mixture

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to one or more downstream usage facilities (such as polishers or storage - Col. 4, lines 38-49; col. 6, lines 39-46; and col. 8, lines 46-54 and lines 63-67).

\* \* \*

26. While the examiner might speculate as to what is meant by the language of claim 6 in view of the apparent improper dependency, the uncertainty provides the examiner with no proper basis for making the comparison between that which is claimed and the prior art (MPEP 2173.06). Rejections under 35 U.S.C. 103 should not be based upon "considerable speculation as to the meaning of terms employed and assumptions as to the scope of the claims." *In re Steele*, 305 F.2d 859, 134 USPQ 292 (CCPA 1962). When no reasonably definite meaning can be ascribed to certain terms in a claim, the subject matter does not become obvious, but rather the claim becomes indefinite. *In re Wilson*, 424 F.2d 1382, 165 USPQ 494 (CCPA 1970). As it has been held that it is improper to rely on what are at best speculative assumptions as to the meaning of a claim and then base a rejection under 35 U.S.C. 103 thereon, no such rejections have been made concerning claim 6. *Ex parte Brummer*, 12 USPQ2d 1654. However, the lack of such rejections should not be construed as meaning that the claims as presently drawn would be patentable if corrected. Any response should carefully consider the prior art of record in accordance with 37 CFR 1.111.

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***Allowable Subject Matter***

27. Claims 2 and 4 would be allowable if rewritten to overcome the rejections under 35 U.S.C. § 112 and to include all of the limitations of the base claim and any intervening claims.

***Response to Amendment***

28. Applicant's arguments filed 03 OCT 2002 have been fully considered but they are not deemed to be persuasive.

Applicant is reminded that "[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). The elements must be arranged as required by the claim, but this is not an ipsissimis verbis test, i.e., identity of terminology is not required. *In re Bond*, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990).

Turning to the rejection of the claims under 35 U.S.C. § 102(b), it is noted that the terminology in a pending application's claims is to be given its broadest reasonable interpretation (*In re Zletz*, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989)) and limitations from a pending application's specification will not be read into the claims (*Sjolund v. Musland*, 847 F.2d 1573, 1581-82, 6 USPQ2d 2020, 2027 (Fed. Cir. 1988)).

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Anticipation under 35 U.S.C. § 102(b) is established only when a single prior art reference discloses, either expressly or under the principles of inherency, each and every element of a claimed invention. See *Constant v. Advanced Micro-Devices, Inc.*, 848 F.2d 1560, 1570, 7 USPQ2d 1057, 1064 (Fed. Cir.), cert. denied, 488 U.S. 892 (1988); *RCA Corp. v. Applied Digital Data Sys., Inc.*, 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir. 1984). Moreover, anticipation by a prior art reference does not require either the inventive concept of the claimed subject matter or the recognition of properties that are inherently possessed by the prior art reference. *Verdegaal Brothers Inc. v. Union Oil Co. of California*, 814 F.2d 628, 633, 2 USPQ2d 1051, 1054 (Fed. Cir. 1987), cert. denied, 484 U.S. 827 (1987). A prior art reference anticipates the subject matter of a claim when that reference discloses each and every element set forth in the claim (*In re Paulsen*, 30 F.3d 1475, 1478-79, 31 USPQ2d 1671, 1673 (Fed. Cir. 1994) and *In re Spada*, 911 F.2d 705, 708, 15 USPQ2d 1655, 1657 (Fed. Cir. 1990)); however, the law of anticipation does not require that the reference teach what Applicant is claiming, but only that the claims "read on" something disclosed in the reference. *Kalman v. Kimberly-Clark Corp.*, 713 F.2d 760, 772, 218 USPQ 781, 789 (Fed. Cir. 1983), cert. denied, 465 U.S. 1026 (1984) (and overruled in part on another issue), *SRI Intel v. Matsushita Elec. Corp. Of Am.*, 775 F.2d 1107, 1118, 227 USPQ 577, 583 (Fed. Cir. 1985). Also, a reference anticipates a claim if it discloses the claimed invention such that a skilled artisan could take its teachings in combination

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with his own knowledge of the particular art and be in possession of the invention. See *In re Graves*, 69 F.3d 1147, 1152, 36 USPQ2d 1697, 1701 (Fed. Cir. 1995), *cert. denied*, 116 S.Ct. 1362 (1996), quoting from *In re LeGrice*, 301 F.2d 929, 936, 133 USPQ 365, 372 (CCPA 1962).

With respect to the applied prior art under 35 U.S.C. § 102(b), the examiner has explicitly demonstrated how the reference discloses each and every element set forth in the claims and how the pending claims read on the disclosure of the reference, hence the rejection is considered proper.

The pith of Applicant's arguments are directed to functional, rather than structural distinctions between the claimed invention and the prior art. Claims directed to apparatus must be distinguished from the prior art in terms of structure rather than function. *In re Danley*, 120 USPQ 528, 531 (CCPA 1959). "Apparatus claims cover what a device is, not what a device does." (emphasis in original) *Hewlett-Packard Co. v. Bausch & Lomb Inc.*, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990).

The scope of the "without circulation" limitation is unknown as explained above and nevertheless fails to impact patentability of the apparatus claims since in apparatus claims the material or article worked upon does not limit apparatus claims and is not a major consideration when determining the patentability of said apparatus claims (MPEP 2115). "Expressions relating the apparatus to contents thereof during an intended operation are of no significance in determining patentability of the apparatus claim." *Ex*

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*parte Thibault*, 164 USPQ 666, 667 (Bd. App. 1969). Furthermore, "[i]nclusion of material or article worked upon by a structure being claimed does not impart patentability to the claims." *In re Young*, 75 F.2d 966, 25 USPQ 69 (CCPA 1935) (as restated in *In re Otto*, 312 F.2d 937, 136 USPQ 458, 459 (CCPA 1963)). Accordingly, since the solvent is part of the material worked upon by the chemical supply system it is irrelevant from a patentability standpoint of the pending apparatus claims whether the solvent flows with or without circulation, even if the scope of this limitation was definite. Applicant further argues that the various patents do not disclose the particular materials set forth in the claims (e.g., a high concentration liquid chemical), yet such materials do not further define the claimed structure and thus fail to impact the patentability of the apparatus claims as noted earlier in this paragraph.

The scope of claim 1 is also indefinite with regard to the chemical treatment chamber issue as explained above. Nonetheless, the patent to Suzuki et al. discloses downstream chambers and the patent to Ferri, Jr. et al. clearly reveals the obviousness of such a component in a chemical supply system. Note the scope of the broad term "chemical treatment chamber" is merely considered equivalent to a chamber lacking any defining structure to the contrary.

The patent to Pawloski et al. clearly teaches the provision of a cooling means 32 in a chemical processing system which cools the elements in the loop in which a pump is disposed which meets the subject matter of claim 5. Therefore, in response to

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Applicant's argument that the cooling means of the instant invention is used for a different purpose than the cooling means of the prior art, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

In conclusion, the amendments made in the instant application are not deemed of a substantive nature to define over the prior art and thus the rejections are considered proper.

### **Conclusion**

29. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R. § 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION. **ANY RESPONSE FILED AFTER THE MAILING DATE OF THIS FINAL REJECTION WILL BE SUBJECT TO THE PROVISIONS OF MPEP 714.12 AND 714.13.**

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30. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Charles Cooley whose telephone number is ☎ (703) 308-0112.

31. Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center 1700 receptionist whose telephone number is ☎ (703) 308-0651.

Dated: **6 December 2002**

A handwritten signature in cursive script, appearing to read "Charles Cooley", written over a horizontal line.

**Charles Cooley**  
**Primary Examiner**  
**Art Unit 1723**